

# Line Hagner Nielsen

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4210139/publications.pdf>

Version: 2024-02-01

105  
papers

2,771  
citations

159573

30  
h-index

223791

46  
g-index

107  
all docs

107  
docs citations

107  
times ranked

3527  
citing authors

#	ARTICLE	IF	CITATIONS
1	Refining stability and dissolution rate of amorphous drug formulations. <i>Expert Opinion on Drug Delivery</i> , 2014, 11, 977-989.	5.0	119
2	Ciprofloxacin-loaded sodium alginate/poly (lactic-co-glycolic acid) electrospun fibrous mats for wound healing. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2018, 123, 42-49.	4.3	103
3	Micromotors for drug delivery in vivo: The road ahead. <i>Advanced Drug Delivery Reviews</i> , 2019, 138, 41-55.	13.7	99
4	Detection of nerve gases using surface-enhanced Raman scattering substrates with high droplet adhesion. <i>Nanoscale</i> , 2016, 8, 1305-1308.	5.6	91
5	Process Optimization of Ultrasonic Spray Coating of Polymer Films. <i>Langmuir</i> , 2013, 29, 6911-6919.	3.5	82
6	Hand-Held Femtogram Detection of Hazardous Picric Acid with Hydrophobic Ag Nanopillar SERS Substrates and Mechanism of Elasto-Capillarity. <i>ACS Sensors</i> , 2017, 2, 198-202.	7.8	81
7	Development of electrosprayed mucoadhesive chitosan microparticles. <i>Carbohydrate Polymers</i> , 2018, 190, 240-247.	10.2	73
8	Wafer-Scale Leaning Silver Nanopillars for Molecular Detection at Ultra-Low Concentrations. <i>Journal of Physical Chemistry C</i> , 2015, 119, 2053-2062.	3.1	71
9	Polymeric carriers for enhanced delivery of probiotics. <i>Advanced Drug Delivery Reviews</i> , 2020, 161-162, 1-21.	13.7	66
10	Polymeric nano- and microparticulate drug delivery systems for treatment of biofilms. <i>Advanced Drug Delivery Reviews</i> , 2021, 174, 30-52.	13.7	62
11	Polymer-filled microcontainers for oral delivery loaded using supercritical impregnation. <i>Journal of Controlled Release</i> , 2014, 173, 1-9.	9.9	61
12	Microfabricated devices for oral drug delivery. <i>Lab on A Chip</i> , 2018, 18, 2348-2358.	6.0	61
13	Polymeric microcontainers improve oral bioavailability of furosemide. <i>International Journal of Pharmaceutics</i> , 2016, 504, 98-109.	5.2	59
14	Preparation of an amorphous sodium furosemide salt improves solubility and dissolution rate and leads to a faster T <sub>max</sub> after oral dosing to rats. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2013, 85, 942-951.	4.3	58
15	Photothermal Analysis of Individual Nanoparticulate Samples Using Micromechanical Resonators. <i>ACS Nano</i> , 2013, 7, 6188-6193.	14.6	57
16	From concept to in vivo testing: Microcontainers for oral drug delivery. <i>Journal of Controlled Release</i> , 2017, 268, 343-351.	9.9	55
17	Spatial confinement can lead to increased stability of amorphous indomethacin. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2012, 81, 418-425.	4.3	54
18	Detecting forensic substances using commercially available SERS substrates and handheld Raman spectrometers. <i>Talanta</i> , 2018, 189, 649-652.	5.5	53

#	ARTICLE	IF	CITATIONS
19	Quantitative SERS Assay on a Single Chip Enabled by Electrochemically Assisted Regeneration: A Method for Detection of Melamine in Milk. <i>Analytical Chemistry</i> , 2020, 92, 4317-4325.	6.5	53
20	Lab-on-a-disc agglutination assay for protein detection by optomagnetic readout and optical imaging using nano- and micro-sized magnetic beads. <i>Biosensors and Bioelectronics</i> , 2016, 85, 351-357.	10.1	40
21	Microcontainers as an oral delivery system for spray dried cubosomes containing ovalbumin. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2017, 118, 13-20.	4.3	39
22	Orally ingestible medical devices for gut engineering. <i>Advanced Drug Delivery Reviews</i> , 2020, 165-166, 142-154.	13.7	39
23	3D Printing of Reservoir Devices for Oral Drug Delivery: From Concept to Functionality through Design Improvement for Enhanced Mucoadhesion. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 2478-2486.	5.2	38
24	Towards quantitative SERS detection of hydrogen cyanide at ppb level for human breath analysis. <i>Sensing and Bio-Sensing Research</i> , 2015, 5, 84-89.	4.2	34
25	Animal models for evaluation of oral delivery of biopharmaceuticals. <i>Journal of Controlled Release</i> , 2017, 268, 57-71.	9.9	34
26	Microcontainers for protection of oral vaccines, in vitro and in vivo evaluation. <i>Journal of Controlled Release</i> , 2019, 294, 91-101.	9.9	34
27	Photothermal Infrared Spectroscopy of Airborne Samples with Mechanical String Resonators. <i>Analytical Chemistry</i> , 2013, 85, 10531-10535.	6.5	33
28	Stability, liposome interaction, and in vivo pharmacology of ghrelin in liposomal suspensions. <i>International Journal of Pharmaceutics</i> , 2010, 390, 13-18.	5.2	31
29	Lab-on-a-disc platform for screening of genetically modified <i>E. coli</i> cells via cell-free electrochemical detection of p-Coumaric acid. <i>Sensors and Actuators B: Chemical</i> , 2017, 253, 999-1005.	7.8	31
30	Injection molded lab-on-a-disc platform for screening of genetically modified <i>E. coli</i> using liquid-liquid extraction and surface enhanced Raman scattering. <i>Lab on A Chip</i> , 2018, 18, 869-877.	6.0	31
31	Microcontainers for oral insulin delivery – In vitro studies of permeation enhancement. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2019, 143, 98-105.	4.3	31
32	Optimized plasma-deposited fluorocarbon coating for dry release and passivation of thin SU-8 cantilevers. <i>Journal of Vacuum Science &amp; Technology B</i> , 2007, 25, 1903.	1.3	30
33	Spray dried cubosomes with ovalbumin and Quil-A as a nanoparticulate dry powder vaccine formulation. <i>International Journal of Pharmaceutics</i> , 2018, 550, 35-44.	5.2	30
34	pH-triggered drug release from biodegradable microwells for oral drug delivery. <i>Biomedical Microdevices</i> , 2015, 17, 9958.	2.8	29
35	Biorelevant characterisation of amorphous furosemide salt exhibits conversion to a furosemide hydrate during dissolution. <i>International Journal of Pharmaceutics</i> , 2013, 457, 14-24.	5.2	28
36	Nanopillar Filters for Surface-Enhanced Raman Spectroscopy. <i>ACS Sensors</i> , 2017, 2, 1400-1404.	7.8	28

#	ARTICLE	IF	CITATIONS
37	Biodegradable microcontainers "towards real life applications of microfabricated systems for oral drug delivery. Lab on A Chip, 2019, 19, 2905-2914.	6.0	28
38	Diffusion of water into SU-8 microcantilevers. Physical Chemistry Chemical Physics, 2010, 12, 10577.	2.8	26
39	Drug loaded biodegradable polymer microneedles fabricated by hot embossing. Microelectronic Engineering, 2018, 195, 57-61.	2.4	26
40	Inkjet printing as a technique for filling of micro-wells with biocompatible polymers. Microelectronic Engineering, 2013, 111, 391-395.	2.4	25
41	Developing a predictive in vitro dissolution model based on gastrointestinal fluid characterisation in rats. European Journal of Pharmaceutics and Biopharmaceutics, 2019, 142, 307-314.	4.3	24
42	Design of a self-unfolding delivery concept for oral administration of macromolecules. Journal of Controlled Release, 2021, 329, 948-954.	9.9	24
43	Powder embossing method for selective loading of polymeric microcontainers with drug formulation. Microelectronic Engineering, 2017, 171, 20-24.	2.4	23
44	Stabilisation of amorphous furosemide increases the oral drug bioavailability in rats. International Journal of Pharmaceutics, 2015, 490, 334-340.	5.2	22
45	Surface Enhanced Raman Scattering for Quantification of <i>p</i> -Coumaric Acid Produced by <i>Escherichia coli</i> . Analytical Chemistry, 2017, 89, 3981-3987.	6.5	22
46	Nanomechanical Infrared Spectroscopy with Vibrating Filters for Pharmaceutical Analysis. Angewandte Chemie - International Edition, 2017, 56, 3901-3905.	13.8	22
47	Investigation of Mucoadhesion and Degradation of PCL and PLGA Microcontainers for Oral Drug Delivery. Polymers, 2019, 11, 1828.	4.5	22
48	Long lasting mucoadhesive membrane based on alginate and chitosan for intravaginal drug delivery. Journal of Materials Science: Materials in Medicine, 2020, 31, 25.	3.6	21
49	Ex vivo intestinal perfusion model for investigating mucoadhesion of microcontainers. International Journal of Pharmaceutics, 2019, 570, 118658.	5.2	20
50	In Vitro, Ex Vivo and In Vivo Evaluation of Microcontainers for Oral Delivery of Insulin. Pharmaceutics, 2020, 12, 48.	4.5	20
51	Integrating electrochemical detection with centrifugal microfluidics for real-time and fully automated sample testing. RSC Advances, 2015, 5, 17187-17193.	3.6	19
52	Colon-Specific Delivery of Bioactive Agents Using Genipin-Cross-Linked Chitosan Coated Microcontainers. ACS Applied Bio Materials, 2021, 4, 752-762.	4.6	19
53	Hot punching of high-aspect-ratio 3D polymeric microstructures for drug delivery. Lab on A Chip, 2015, 15, 2576-2579.	6.0	18
54	Modular, Lightweight, Wireless Potentiostat-on-a-Disc for Electrochemical Detection in Centrifugal Microfluidics. Analytical Chemistry, 2019, 91, 11620-11628.	6.5	18

#	ARTICLE	IF	CITATIONS
55	Surface Stabilization and Dissolution Rate Improvement of Amorphous Compacts with Thin Polymer Coatings: Can We Have It All?. <i>Molecular Pharmaceutics</i> , 2020, 17, 1248-1260.	4.6	18
56	Hot embossing and mechanical punching of biodegradable microcontainers for oral drug delivery. <i>Microelectronic Engineering</i> , 2015, 133, 104-109.	2.4	17
57	Polymeric Lids for Microcontainers for Oral Protein Delivery. <i>Macromolecular Bioscience</i> , 2019, 19, e1900004.	4.1	17
58	Microcontainer Delivery of Antibiotic Improves Treatment of <i>Pseudomonas aeruginosa</i> Biofilms. <i>Advanced Healthcare Materials</i> , 2020, 9, e1901779.	7.6	17
59	Extraction, Enrichment, and in situ Electrochemical Detection on Lab-on-a-Disc: Monitoring the Production of a Bacterial Secondary Metabolite. <i>ACS Sensors</i> , 2019, 4, 398-405.	7.8	16
60	Cubic Microcontainers Improve In Situ Colonic Mucoadhesion and Absorption of Amoxicillin in Rats. <i>Pharmaceutics</i> , 2020, 12, 355.	4.5	16
61	3D microstructuring of biodegradable polymers. <i>Microelectronic Engineering</i> , 2011, 88, 2342-2344.	2.4	15
62	Quantification of a bacterial secondary metabolite by SERS combined with SLM extraction for bioprocess monitoring. <i>Analyst</i> , 2017, 142, 4553-4559.	3.5	15
63	Blu-Ray-based micromechanical characterization platform for biopolymer degradation assessment. <i>Sensors and Actuators B: Chemical</i> , 2017, 241, 1303-1309.	7.8	15
64	Stability of lysozyme incorporated into electrospun fibrous mats for wound healing. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2019, 136, 240-249.	4.3	15
65	Optimizing oral delivery of next generation probiotics. <i>Trends in Food Science and Technology</i> , 2022, 119, 101-109.	15.1	15
66	Ferromagnetic shadow mask for spray coating of polymer patterns. <i>Microelectronic Engineering</i> , 2013, 110, 427-431.	2.4	13
67	Characterization of thin gelatin hydrogel membranes with balloon properties for dynamic tissue engineering. <i>Biopolymers</i> , 2019, 110, e23241.	2.4	13
68	Effect of supersaturation on absorption of indomethacin and tadalafil in a single pass intestinal perfusion rat model, in the absence and presence of a precipitation inhibitor. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2020, 151, 108-115.	4.3	13
69	Tissue-based biosensor for monitoring the antioxidant effect of orally administered drugs in the intestine. <i>Bioelectrochemistry</i> , 2021, 138, 107720.	4.6	13
70	X-ray Imaging for Gastrointestinal Tracking of Microscale Oral Drug Delivery Devices. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 2538-2547.	5.2	13
71	Controlled Drug Release from Biodegradable Polymer Matrix Loaded in Microcontainers Using Hot Punching. <i>Pharmaceutics</i> , 2020, 12, 1050.	4.5	12
72	A slow cooling rate of indomethacin melt spatially confined in microcontainers increases the physical stability of the amorphous drug without influencing its biorelevant dissolution behaviour. <i>Drug Delivery and Translational Research</i> , 2014, 4, 268-274.	5.8	11

#	ARTICLE	IF	CITATIONS
73	Fully replicable and automated retention measurement setup for characterization of bio-adhesion. <i>HardwareX</i> , 2019, 6, e00071.	2.2	10
74	Development and characterization of a PDMS-based masking method for microfabricated Oral drug delivery devices. <i>Biomedical Microdevices</i> , 2020, 22, 35.	2.8	10
75	Fabrication of Ni stamp with high aspect ratio, two-leveled, cylindrical microstructures using dry etching and electroplating. <i>Journal of Micromechanics and Microengineering</i> , 2015, 25, 055021.	2.6	9
76	Development of a Video-Microscopic Tool To Evaluate the Precipitation Kinetics of Poorly Water Soluble Drugs: A Case Study with Tadalafil and HPMC. <i>Molecular Pharmaceutics</i> , 2017, 14, 4154-4160.	4.6	9
77	Effects of water-absorption and thermal drift on a polymeric photonic crystal slab sensor. <i>Optics Express</i> , 2018, 26, 5416.	3.4	9
78	Evaluation of the effects of spray drying parameters for producing cubosome powder precursors. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2019, 135, 44-48.	4.3	9
79	Bacterial Cell Cultures in a Lab-on-a-Disc: A Simple and Versatile Tool for Quantification of Antibiotic Treatment Efficacy. <i>Analytical Chemistry</i> , 2020, 92, 13871-13879.	6.5	9
80	Sensing technologies and experimental platforms for the characterization of advanced oral drug delivery systems. <i>Advanced Drug Delivery Reviews</i> , 2021, 176, 113850.	13.7	9
81	Self-propelled Janus micromotors for pH-responsive release of small molecule drug. <i>Applied Materials Today</i> , 2022, 27, 101418.	4.3	9
82	Loading of Drug in Polymer Matrices in Microreservoirs for Oral Drug Delivery. <i>Macromolecular Materials and Engineering</i> , 2017, 302, 1600366.	3.6	8
83	Cellular Effects and Delivery Propensity of Penetratin Is Influenced by Conjugation to Parathyroid Hormone Fragment 1-34 in Synergy with pH. <i>Bioconjugate Chemistry</i> , 2018, 29, 371-381.	3.6	8
84	3D Printed Stackable Titer Plate Inserts Supporting Three Interconnected Tissue Models for Drug Transport Studies. <i>Advanced Biology</i> , 2020, 4, 1900289.	3.0	8
85	Single particles as resonators for thermomechanical analysis. <i>Nature Communications</i> , 2020, 11, 1235.	12.8	8
86	Micromechanical Punching: A Versatile Method for Non-Spherical Microparticle Fabrication. <i>Polymers</i> , 2021, 13, 83.	4.5	8
87	Simultaneous quantification of multiple bacterial metabolites using surface-enhanced Raman scattering. <i>The Analyst</i> , 2019, 144, 1600-1607.	3.5	7
88	In vitro and in vivo comparison of microcontainers and microspheres for oral drug delivery. <i>International Journal of Pharmaceutics</i> , 2021, 600, 120516.	5.2	7
89	Volumetric Raman chemical imaging of drug delivery systems. <i>Journal of Raman Spectroscopy</i> , 2020, 51, 1153-1159.	2.5	6
90	Preparation and Characterization of an Oral Vaccine Formulation Using Electrospayed Chitosan Microparticles. <i>AAPS PharmSciTech</i> , 2018, 19, 3770-3777.	3.3	5

#	ARTICLE	IF	CITATIONS
91	Where Is the Drug? Quantitative 3D Distribution Analyses of Confined Drug-Loaded Polymer Matrices. ACS Biomaterials Science and Engineering, 2019, 5, 2935-2941.	5.2	5
92	Microdevices to successfully deliver orally administered drugs. , 2020, , 285-315.		5
93	Management of oral biofilms by nisin delivery in adhesive microdevices. European Journal of Pharmaceutics and Biopharmaceutics, 2021, 167, 83-88.	4.3	5
94	Nanomechanical Infrared Spectroscopy with Vibrating Filters for Pharmaceutical Analysis. Angewandte Chemie, 2017, 129, 3959-3963.	2.0	3
95	Evaluation of the solid state form of tadalafil in sub-micron thin films using nanomechanical infrared spectroscopy. International Journal of Pharmaceutics, 2019, 565, 227-232.	5.2	3
96	Consumer-Grade Inkjet Printer for Versatile and Precise Chemical Deposition. ACS Omega, 2021, 6, 7786-7794.	3.5	3
97	Co-delivery of ciprofloxacin and colistin using microcontainers for bacterial biofilm treatment. International Journal of Pharmaceutics, 2021, 599, 120420.	5.2	3
98	Enhanced Eradication of Mucin-Embedded Bacterial Biofilm by Locally Delivered Antibiotics in Functionalized Microcontainers. Macromolecular Bioscience, 2021, 21, 2100150.	4.1	3
99	Open-source force analyzer with broad sensing range based on an optical pickup unit. HardwareX, 2022, 11, e00308.	2.2	2
100	Temperature-Modulated Micromechanical Thermal Analysis with Microstring Resonators Detects Multiple Coherent Features of Small Molecule Glass Transition. Sensors, 2020, 20, 1019.	3.8	1
101	Hot punching for loading of biodegradable microcontainers with budesonide-Soluplus film. Biomedical Microdevices, 2021, 23, 37.	2.8	1
102	Open source anaerobic and temperature-controlled in vitro model enabling real-time release studies with live bacteria. HardwareX, 2022, 11, e00275.	2.2	1
103	Impact of oral gavage technique of drug-containing microcontainers on the gastrointestinal transit and absorption in rats. International Journal of Pharmaceutics, 2022, 618, 121630.	5.2	1
104	Gradient Droplet Arrays by Acceleration-Mode Dip-Coating. Advanced Materials Interfaces, 2022, 9, .	3.7	1
105	Marangoni-induced pepper-patterns: Transition from circle to star shape. Surfaces and Interfaces, 2021, 26, 101443.	3.0	0